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AGRICULTURAL MEMORANDUM NO 691

Febrile Sore Throat - effect of previous weather - L. P. SMITH

Ag Memos 682 and 682a used Kew and Kew-Speke weather data over a 4 week period starting 7 days before the disease period.

Kew-Leeming data were then analysed with respect to three vapour pressure periods

VP_1 the 14 days starting 3 days previous to the disease period

VP_2 the next 14 days

VP_0 the 7 days, earlier than the start of VP_1, that is, starting 10 days previous to the disease period.

It was found

$$C_T = 131 + 0.32F + 0.9VP_1 - 2.1VP_2 - 1.9VP_0$$

or with little loss of accuracy

$$C_T = 134 + 0.31F - 1.5VP_2 - 1.6VP_0$$

with a multiple correlation of 0.74 and a test correlation on 39 sets of independent data of 0.80.

Using the vapour pressure factor in terms of the square of the divergence from 10, produced a slight improvement.

This suggests that the weather preceding attacks of the febrile sore throat may occur up to 10 days before seeing a doctor.

A simulation model was attempted but both peaks and troughs are reduced in magnitude and the correlation was 0.73.

Any comments or suggestions on this paper should be referred to the author.

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